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DATE: Monday, March 15, 2004

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	L3	t7-pol	2
	L2	(rna polymerase and silen\$) [clm]	2
	L1	(rna polymerase and silenc) [clm]	0

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                 STN Entry Date available for display in REGISTRY and CA/CAplus
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=> s t7 and plant? 1075 T7 AND PLANT?

=> s l1 and t7 promoter L2215 L1 AND T7 PROMOTER

=> s 12 and rna polymerase 52 L2 AND RNA POLYMERASE

=> dup rem 13 PROCESSING COMPLETED FOR L3 39 DUP REM L3 (13 DUPLICATES REMOVED)

=> d 1-10 ti

L4ANSWER 1 OF 39 CAPLUS COPYRIGHT 2004 ACS on STN

Method for the in vitro synthesis of short double stranded RNAs and use TIthereof for RNA interference and gene silencing

ANSWER 2 OF 39 CAPLUS COPYRIGHT 2004 ACS on STN T.4

Methods and compositions for independent DNA replication in eukaryotic TI cells, by introducing a replication cassette and a replication system into a cell

ANSWER 3 OF 39 CAPLUS COPYRIGHT 2004 ACS on STN L4TT

Construction of regulated systems in plants using multiple transformations using infection with a plant viral vector to initiate regulated processes

ANSWER 4 OF 39 CAPLUS COPYRIGHT 2004 ACS on STN L4

Establishment of a coupled expression system mediated by modified TIT7 RNA polymerase gene

ANSWER 5 OF 39 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN L4

Translocation of 3-deoxy-D-arabino-heptulosonate 7-phosphate synthase TΙ precursor into isolated chloroplasts.

ANSWER 6 OF 39 CAPLUS COPYRIGHT 2004 ACS on STN 1.4

Completion of nucleotide sequence and generation of highly infectious TΤ transcripts to cucurbits from full-length cDNA clone of Kyuri green mottle mosaic virus

- ANSWER 7 OF 39 CAPLUS COPYRIGHT 2004 ACS on STN L4
- Comparison of strength of endogenous and exogenous gene promoters in TIArabidopsis chloroplasts
- ANSWER 8 OF 39 CAPLUS COPYRIGHT 2004 ACS ON STN L4
- Delivery of functional protein sequences by translocating polypeptides TI
- ANSWER 9 OF 39 CAPLUS COPYRIGHT 2004 ACS on STN L4
- A gene expression silencing system and its different uses TI
- ANSWER 10 OF 39 CAPLUS COPYRIGHT 2004 ACS on STN L4
- Expression constructs for high-level, RNA polymerase II-independent, cap-independent expression of  $\delta$ -endotoxin genes in TIplants

# => d ab

- ANSWER 1 OF 39 CAPLUS COPYRIGHT 2004 ACS on STN L4
- The present invention relates to the field of synthesis of short double-stranded RNAs. An in vitro transcription method using AΒ bacteriophage polymerases and target sequence-specific single-stranded DNA oligonucleotides as templates is disclosed. The present invention finds particularly advantageous use in the synthesis of short interfering RNAs (siRNAs) that have been shown to function as key intermediates in triggering sequence-specific RNA degradation during posttranscriptional gene silencing in plants and RNA interference in invertebrates and vertebrate systems. Specifically, RNA interference in human cells induced by EGFP and plasmid GL3 specific short dsRNAs transcribed in vitro is demonstrated. In addition, mouse Insr (insulin receptor) gene specific short dsRNAs transcribed in vitro is shown to knockdown Insr in liver of Balb/C mice.

## => d so

- ANSWER 1 OF 39 CAPLUS COPYRIGHT 2004 ACS on STN L4
- PCT Int. Appl., 40 pp. SO

CODEN: PIXXD2

## => d pi

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ANSWER 1 OF 39 CAPLUS COPYRIGHT 2004 ACS on STN
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T.4
          PATENT NO.
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                                                                                    WO 2002-EP12165 20021030
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          WO 2003040294 A2
DT
                                                      20031224
          WO 2003040294
                                            A3
                        AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
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                  RU, TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR,
                           NE, SN, TD, TG
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=> d 3 so

ANSWER 3 OF 39 CAPLUS COPYRIGHT 2004 ACS on STN

en., 92 pp. WXXBX

OF 39 CAPLUS COPYRIGHT 2004 ACS ON STN Science Bulletin (2002), 47(14), 1197-1201 SBUEF; ISSN: 1001-6538

OF 39 CAPLUS COPYRIGHT 2004 ACS on STN dexpression system for plants was established in this The 5'-terminal of T7 RNA polymerase modified by addition of the coding sequence of nuclear location rom SV40 large T antigen. Plant expression vector pBBT7 tructed with the modified T7 RNA se gene under the control of CaMV35S promoter. Another on vector pBTG contained cassette of gusA controlled by T7.

The two vectors were co-transformed into tobacco via becterium-mediated method. Results of GUS activity indicated that transformed plant with pBBT7 and pBTG showed a high level ctivity. The results demonstrated that the coupled expression f T7 polymerase and T7 promoter was in plants.

OF 39 CAPLUS COPYRIGHT 2004 ACS on STN ng; Lu, Zixian; Chang, Tuanjie; Xu, Honglin; Wu, Qian; Xiao, Zhu, Zhen

OF 39 CAPLUS COPYRIGHT 2004 ACS on STN focused on possible stronger promoters in the chloroplast: those encoding D1 protein of photosystem II reaction center, 16SrDNA in on, the bacterial fused promoter tac, and the bacteriophage .vphi. in combination with transgenic  $\mathbf{T7}$  merase (RNAP). Arabidopsis plants e transgenic in the nuclear genome with the construct of a gene for  $\mathbf{T7}$  RNAP fused to a chloroplast transit peptide terminus placed under the control of CaMV 35S promoter. We have tly expressed gene for  $\beta$ -glucuronidase (GUS) under control of e promoters in the Arabidopaiss chloroplast followed by particle tent. Expression in the chloroplast but not in the nucleus was d histochem, and by treatment with  $\alpha$ -amanitin.  $\mathbf{T7}$  was the strongest among the examined promoters in the sis chloroplast, being applicable to higher expression of foreign the chloroplast with managed expression of  $\mathbf{T7}$  RNAP.

OF 39 CAPLUS COPYRIGHT 2004 ACS on STN otechnology (Tokyo) (2001), 18(2), 135-142 CLBIF6; ISSN: 1342-4580

ANSWER 8 OF 39 CAPLUS COPYRIGHT 2004 ACS on STN The invention provides methods for modulating a cellular process by T.4 AΒ contacting a cell in culture with a cell process-modifying mol. attached to a translocating polypeptide. For example, in one embodiment, a cell in culture is transfected with a target gene by contacting the cell in culture with a polynucleotide (that contains the target gene) attached to a translocating polypeptide. In another embodiment, expression of a target gene product in a cell in culture that contains a target gene under control of one or more regulatory elements is modulated by contacting the cell in culture with one or more regulatory agents attached to a translocating polypeptide. The one or more regulatory agents are translocated into the cell in culture and interact therein with the one or more regulatory elements to modulate expression of the target gene product by the cell. The translocating polypeptide is selected from VP22, Antp, Protein H, histone 1, high mobility group 17 protein (HMG17), a polylysine, oligonucleotide having LARL repeats. It could also be attached to a nuclear export signal such as HIV Rev protein or heat stable inhibitor of cAPK. They are resistant to proteolysis, capable of receptor-independent and energy-free cell-membrane penetration. Use of T7 RNA polymerase to modulate a T7 promoter or HIV Rev protein to modulate the HIV Rev response element (RRE) is described. The regulatory agent may be attached to the translocating polypeptide via a linker containing disulfide bonds, salicylhydroxamic acid (SHA), phenylboronic acid (PBA), a SHA-NHS ester, such as biotin-streptavidin complex and E. coli single stranded DNA binding protein. They may be part of a fusion protein. A single chain antibody (sFv) may be the regulatory agent. Use of recombinase such as Flp recognizing frt recombination sites or Cre recognizing lox recombination sites to stably integrate the target gene into genome of a

cell is claimed. The target gene may be a reporter gene or a toxic

protein gene, and contain a protein tag such as myc epitope, a fluorescent peptide, or a poly His tag. A mammalian or insect cell may be contacted with an addnl. cell, prokaryotic or eukaryotic. Vectors used for the

=> d 9 ab

method are also claimed.

ANSWER 9 OF 39 CAPLUS COPYRIGHT 2004 ACS on STN The invention relates to an expression-silencing system. A first DNA T.4 construct comprises a nucleotide sequence corresponding to the T7 RNA polymerase gene (T7-pol) which carries an NLS (nuclear localization signal) sequence, and at least one promoter and at least one terminator sequence operably linked to the T7-pol. A second DNA construct comprises a T7 promoter sequence (pT7), at least one targeting sequence downstream to said pT7 and at least one 3' non-translated terminator sequence operably linked to the targeting sequence. The targeting sequence can comprise tobacco mosaic virus non-coding sequence  $\Omega$ , and the terminator may originate from the NOS gene or the  $\beta$ -1,3-glucanase gene. The system can, upon its introduction into a cell, substantially silence the expression at the RNA level of a target sequence in the cell, in a tissue or organ regenerated from said cell, or in a progeny thereof, substantially silenced, by causing the substantial disappearance of the RNA or RNA transcript carrying said sequence or a functional part thereof. This silencing system may be used to identify a nucleic acid of interest within a plant's genome.

=> d 9 pi

ANSWER 9 OF 39 CAPLUS COPYRIGHT 2004 ACS on STN APPLICATION NO. DATE KIND DATE PATENT NO.

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PI WO 2000042206 A1 20000720 WO 2000-IL29 20000116

W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

CA 2359356 AA 20000720 CA 2000-2359356 20000116
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## => d 10 ab

ANSWER 10 OF 39 CAPLUS COPYRIGHT 2004 ACS on STN T<sub>1</sub>4 Expression constructs that use plant virus regulatory elements and translation signals to achieve high levels of expression of foreign AΒ genes in plants are described. These constructs are particularly intended for the expression of  $\delta$ -endotoxin genes or other genes that have AU-rich transcripts. The invention thus relates to a process that comprises the RNA polymerase II independent production of predominantly uncapped, non-polyadenylated RNA transcripts of the native coding sequences of AT-rich genes, preferably Bacillus thuringiensis ICP (insecticidal crystal protein) genes. bacteriophage T3 or T7 promoter is used to transcribe the gene. Viral translation-promoting sequences are used at the 5'- and 3'-ends of the transcript to promote efficient translation without capping. These vectors can be used in the construction of insect-resistant transgenic plants. Also provided in the invention are plant cells and plants comprising these chimeric genes, integrated in their nuclear DNA, whereby the plant cell produces the RNA polymerases corresponding to the used promoters and terminators. Further the invention provides a process for producing a plant expressing a protein or polypeptide encoded by a heterologous gene which comprises the steps of transforming the nuclear genome of a plant cell with the above-mentioned chimeric genes; and regenerating a transformed plant from the transformed cell.

## => d 10 pi

L4	ANSWER 10 OF 39 PATENT NO.	CAPLUS COPYRIGHT 20 KIND DATE	04 ACS on STN APPLICATION NO.	DATE
PI	US 5994526	A 19991130	US 1997-880169	19970620
	US 6294711	B1 20010925	US 1999-363970	19990729

#### => d 11-20 ti

- L4 ANSWER 11 OF 39 CAPLUS COPYRIGHT 2004 ACS on STN DUPLICATE 1
- Use of Rifampicin in T7 RNA Polymerase
  -Driven Expression of a Plant Enzyme: Rifampicin Improves Yield and Assembly
- ANSWER 12 OF 39 AGRICOLA Compiled and distributed by the National Agricultural Library of the Department of Agriculture of the United States of America. It contains copyrighted materials. All rights reserved.

  (2004) on STN
- TI Expression and characterization of rice sucrose synthase in Escherichia coli.

ANSWER 13 OF 39 AGRICOLA Compiled and distributed by the National Agricultural Library of the Department of Agriculture of the United States of America. It contains copyrighted materials. All rights reserved. DUPLICATE 3

(2004) on STN

- T7 RNA polymerase drives transcription of a TI reporter gene from T7 promoter, but engenders post-transcriptional silencing of expression.
- ANSWER 14 OF 39 CAPLUS COPYRIGHT 2004 ACS on STN T<sub>1</sub>4
- Transgenic plants expressing cellulolytic enzymes ΤT
- ANSWER 15 OF 39 CAPLUS COPYRIGHT 2004 ACS on STN L4
- Expression constructs for high-level, RNA polymerase II-independent, cap-independent expression of  $\delta$ -endotoxin genes in TI plants
- ANSWER 16 OF 39 CAPLUS COPYRIGHT 2004 ACS on STN DUPLICATE 4
- Expression of glutamyl-tRNA reductase in Escherichia coli TI
- ANSWER 17 OF 39 AGRICOLA Compiled and distributed by the National Agricultural Library of the Department of Agriculture of the United States L4of America. It contains copyrighted materials. All rights reserved. DUPLICATE 5 (2004) on STN
- Cloning, nucleotide sequence and expression of the bifunctional dihydrofolate reductase-thymidylate synthase from Glycine maximum TT
- ANSWER 18 OF 39 AGRICOLA Compiled and distributed by the National Agricultural Library of the Department of Agriculture of the United States of America. It contains copyrighted materials. All rights reserved. DUPLICATE 6 (2004) on STN
- Controlled expression of plastid transgenes in plants based on a TInuclear DNA-encoded and plastid-targeted T7 RNA polymerase.
- ANSWER 19 OF 39 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN L4
- Cloning and nucleotide sequence of the pvdA gene encoding the pyoverdin biosynthetic enzyme L-ornithine N-5-oxygenase in Pseudomonas aeruginosa. ΤТ
- ANSWER 20 OF 39 CAPLUS COPYRIGHT 2004 ACS on STN
- Digoxigenin labeling of RNA transcripts from multi- and single-locus DNA L4TΙ minisatellite probes

#### => d 13 so

- ANSWER 13 OF 39 AGRICOLA Compiled and distributed by the National Agricultural Library of the Department of Agriculture of the United States T.4 of America. It contains copyrighted materials. All rights reserved. DUPLICATE 3 (2004) on STN
- Plant science, Feb 22, 1999. Vol. 141, No. 1. p. 59-65 Publisher: Shannon [Clare] : Elsevier Scientific Publishers Ireland Ltd., SO CODEN: PLSCE4; ISSN: 0168-9452

=> d 14 ag 'AG' IS NOT A VALID FORMAT In a multifile environment, a format can only be used if it is valid in at least one of the files. Refer to file specific help messages or the STNGUIDE file for information on formats available in individual files. REENTER DISPLAY FORMAT FOR ALL FILES (FILEDEFAULT):ab

ANSWER 14 OF 39 CAPLUS COPYRIGHT 2004 ACS on STN

The invention provides novel methods of controlling gene expression in plastids, using an inducible, transactivator-mediated system, and AΒ plants comprising the novel expression systems. The present invention further describes the production of cellulose-degrading enzymes in plants via the application of genetic engineering techniques. Cellulase coding sequences are fused to promoters active in plants and transformed into the nuclear genome and the chloroplast genome. As cellulases may be toxic to plants, preferred promoters are those that are chemical-inducible. In this manner, expression of the cellulase genes transformed into plants may be chemical induced at an appropriate time. In addition, the expressed cellulases may be targeted to vacuoles or other organelles to alleviate toxicity problems. In one embodiment, the gene expressed in the plastid is under control of a transactivator-regulated promoter and the gene for the transactivator is in the nuclear DNA under control of an inducible promoter. For example, plastid transformation vectors are typically constructed using a phage promoter, such as the phage T7 gene 10 promoter, the transcriptional activation of which is dependent upon an RNA polymerase such as that from phage T7. The resulting line is crossed to a transgenic line containing a nuclear coding region for a phage RNA polymerase supplemented with a chloroplast-targeting sequence and operably linked to a chemical inducible promoter such as the tobacco PR-1a promoter. Expression of the gene of interest in the chloroplasts of plants resulting from this cross is then activated by foliar application of a chemical inducer. The novel, inducible transactivator-mediated plastid expression system is tightly regulatable, with no detectable expression prior to induction and exceptionally high expression and accumulation of protein following induction. The present invention finds utility in any industrial process requiring a plentiful supply of cellulases, but particularly finds utility in the conversion of cellulosic biomass to ethanol.

## => d 14 pi

L4	ANSWER 14 OF 39 PATENT NO.	CAPLUS COPYRIGHT 2004 ACS ON STN KIND DATE APPLICATION NO. DATE
DT	WO 9811235	A2 19980319 WO 1997-US16187 19970912
PI	WO 9811235  W: AL, AM, ES, FI, LU, LV, SG, SI, KZ, MD, RW: GH, KE, GB, GR, GN, ML, AU 9744146  AU 9744146  AU 728348  EP 925362  R: AT, BE, IE, FI  BR 9711769	A3 19980604 AT, AU, AZ, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, GB, GE, HU, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LS, LT, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SK, TJ, TM, TR, TT, UA, UG, US, UZ, VN, AM, AZ, BY, KG, RU, TJ, TM LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, MR, NE, SN, TD, TG A1 19980402 AU 1997-44146 19970912 B2 20010104 A2 19990630 EP 1997-942451 19970912 CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, A 19990824 BR 1997-11769 19970912
	CN 1230224 JP 2002513275 US 2002062502	T2 20020508 JP 1998-513903 19970912

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L4 ANSWER 15 OF 39 CAPLUS COPYRIGHT 2004 ACS ON STN
PATENT NO. KIND DATE APPLICATION NO. DATE

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P749814

Al 19971231

WO 1997-EP2832

19970530

W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG
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         WO 9749814
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                                                                                            AU 1997-31704
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                                                            19980114
           AU 9731704
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           EP 922104
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                          AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
                            IE, SI, LT, LV, FI, RO
                                                                                            JP 1998-502180
                                                            20001010
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           JP 2000513217
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# => d 18 ab

- ANSWER 18 OF 39 AGRICOLA Compiled and distributed by the National Agricultural Library of the Department of Agriculture of the United States L4of America. It contains copyrighted materials. All rights reserved. DUPLICATE 6 (2004) on STN
- Phage T7 RNA polymerase has been used extensively in Escherichia coli for high-level expression of selected AB genes placed under the control of the phage T7 gene 10 promoter. We have constructed an analogous system for use in plastids of higher plants. A T7 RNA polymerase chimeric gene containing a cauliflower mosaic virus 35S promoter and a tobacco ribulose-bisphosphate carboxylase/oxygenase small-subunit chloroplast transit-peptide sequence was introduced into tobacco by nuclear transformation. Stable plastid formation of tobacco expressing the T7 RNA polymerase transactivity with a T7 promoter/beta-glucuronidase (GUS) reporter gene construct resulted in expression of GUS mRNA and enzyme activity in all tissues examined. Expression of GUS activity was extremely high in mature leaves, moderate in young leaves and petals, and low in stems, roots, and developing seeds. Plastid transformation of wild-type tobacco with the same chimeric GUS gene resulted in undetectable levels of GUS mRNA and enzyme activity. Genetic crosses demonstrated that a silent T7 /GUS reporter gene could be activated in the F1 generation by transmission of an active nuclear T7 RNA polymerase gene from the male parent.

#### => d 18 so

- ANSWER 18 OF 39 AGRICOLA Compiled and distributed by the National Agricultural Library of the Department of Agriculture of the United States of America. It contains copyrighted materials. All rights reserved. DUPLICATE 6
- Proceedings of the National Academy of Sciences of the United States of SO America, July 19, 1994. Vol. 91, No. 15. p. 7301-7305 Publisher: Washington, D.C.: National Academy of Sciences, CODEN: PNASA6; ISSN: 0027-8424

# => d 21-30 ti

- ANSWER 21 OF 39 CAPLUS COPYRIGHT 2004 ACS on STN DUPLICATE 7 T.4
- Transcripts of a maize chlorotic mottle virus cDNA clone replicate in maize protoplasts and infect maize plants
- ANSWER 22 OF 39 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN

- Stable expression plasmid for high-level production of GroE molecular TIchaperones in large-scale cultures.
- ANSWER 23 OF 39 CAPLUS COPYRIGHT 2004 ACS on STN DUPLICATE 8 T<sub>1</sub>4
- Expression and assembly of the potato virus Y (PVY) coat protein (CP) in TT Escherichia coli cells
- ANSWER 24 OF 39 CAPLUS COPYRIGHT 2004 ACS on STN L4
- Melanin production with transgenic microorganisms TΙ
- ANSWER 25 OF 39 CAPLUS COPYRIGHT 2004 ACS on STN L4
- Cellular expression of a functional nodavirus RNA replicon from vaccinia TI virus vectors
- ANSWER 26 OF 39 CAPLUS COPYRIGHT 2004 ACS on STN 1.4
- Cloned DNA copies of cowpea severe mosaic virus genomic RNAs: infectious ΤТ transcripts and complete nucleotide sequence of RNA 1
- ANSWER 27 OF 39 CAPLUS COPYRIGHT 2004 ACS on STN L4
- Infectious in vitro transcripts from amplified cDNAs of the Y and Kin TIstrains of cucumber mosaic virus
- ANSWER 28 OF 39 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN
- THE IN-VITRO SYNTHESIS OF BOVINE ADRENODOXIN PRECURSOR AND ITS TRANSPORT L4TIINTO YEAST MITOCHONDRIA.
- ANSWER 29 OF 39 CAPLUS COPYRIGHT 2004 ACS on STN
- Effect of ethanol and low-temperature culture on expression of soybean L4TIlipoxygenase L-1 in Escherichia coli
- ANSWER 30 OF 39 CAPLUS COPYRIGHT 2004 ACS on STN DUPLICATE 9 L4
- Infectious cucumber mosaic virus RNA transcribed in vitro from clones TTobtained from cDNA amplified using the polymerase chain reaction
- => d 31-39 ti
- ANSWER 31 OF 39 CAPLUS COPYRIGHT 2004 ACS on STN
- Ribozymes that cleave potato leafroll virus RNA within the coat protein T.4 TT and polymerase genes
- ANSWER 32 OF 39 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN L4
- SIGNAL-MEDIATED IMPORT OF BACTERIOPHAGE T7 RNA TIPOLYMERASE INTO THE SACCHAROMYCES-CEREVISIAE NUCLEUS AND SPECIFIC TRANSCRIPTION OF TARGET GENES.
- ANSWER 33 OF 39 CAPLUS COPYRIGHT 2004 ACS on STN
- Binding by mycoplasma RNA polymerase of oligodeoxyribonucleotides related to promoters of genes of different TT microorganisms
- ANSWER 34 OF 39 CAPLUS COPYRIGHT 2004 ACS on STN DUPLICATE 10 T.4
- Improvements of the infectivity of in vitro transcripts from cloned cowpea TI mosaic virus cDNA: impact of terminal nucleotide sequences
- ANSWER 35 OF 39 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN L4
- BIOCHEMICAL AND PHYSICAL CHARACTERIZATION OF AN UNMODIFIED YEAST TT PHENYLALANINE TRANSFER RNA TRANSCRIBED IN-VITRO.
- ANSWER 36 OF 39 CAPLUS COPYRIGHT 2004 ACS on STN L4
- Infectious RNA transcripts derived from full-length DNA copies of the TIgenomic RNAs of cowpea mosaic virus
- ANSWER 37 OF 39 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN L4

- DISTINGUISHING BETWEEN MECHANISMS OF EUKARYOTIC TRANSCRIPTIONAL ACTIVATION TIWITH BACTERIOPHAGE T7 RNA POLYMERASE.
- ANSWER 38 OF 39 CAPLUS COPYRIGHT 2004 ACS on STN L4
- In vitro expression of a full-length DNA copy of cowpea mosaic virus B RNA: identification of the B RNA encoded 24-kd protein as a viral TIprotease
- ANSWER 39 OF 39 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN L4
- A SYNTHETIC SUBSTRATE FOR TRANSFER RNA SPLICING. TΤ

=> d 37 ab

ANSWER 37 OF 39 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN

To distinguish between mechanisms of eukaryotic transcriptional AB activation, we tested whether yeast upstream promoter elements can stimulate transcription by a heterologous transcription machinery, bacteriophage T7 RNA polymerase. The gal enhancer-like element recognized by GAL4 protein or the ded1 poly(dA-dT) element was placed upstream of the T7 promoter and his3 structural gene, and T7 RNA polymerase ws produced in yeast cells. Under conditions where the gal elementwould

normally be either activating or nonactivating, his3 transcription by

T7 RNA polymerase was not stimulated above the level observed in the absence of any upstream element. In contrast, the ded1 poly(dA-dT) element stimulated transcription 7-fold, similar to the enhancement observed on the native ded1 promoter. Activation by the ded1 element thus may involve effects on the chromatin template that facilitate entry of the transcription machinery, whereas activation by the gal element may involve specific contacts between GAL4 and the transcriptional machinery.

=> dis his

(FILE 'HOME' ENTERED AT 16:41:37 ON 15 MAR 2004)

FILE 'AGRICOLA, CAPLUS, BIOSIS' ENTERED AT 16:41:44 ON 15 MAR 2004

1075 S T7 AND PLANT?

L1215 S L1 AND T7 PROMOTER L2

52 S L2 AND RNA POLYMERASE L3

39 DUP REM L3 (13 DUPLICATES REMOVED)

=> s ((tuttle a?) or (tuttle, a?))/au

90 ((TUTTLE A?) OR (TUTTLE, A?))/AU

=> s 15 and t7

3 L5 AND T7 L6

=> dup rem 16

PROCESSING COMPLETED FOR L6

3 DUP REM L6 (0 DUPLICATES REMOVED)

=> d 1-3 ti

ANSWER 1 OF 3 CAPLUS COPYRIGHT 2004 ACS on STN L7

Transgenic expressing mature ragweed pollen allergen for development of anti allergic agent

ANSWER 2 OF 3 CAPLUS COPYRIGHT 2004 ACS on STN

Therapeutic protein production in plants and use of plant and plant Ь7 TΙ products in disease prevention or treatment

L7 ANSWER 3 OF 3 CAPLUS COPYRIGHT 2004 ACS on STN TI Methods for the production of hybrid seeds

=> d ab

ANSWER 1 OF 3 CAPLUS COPYRIGHT 2004 ACS on STN

The present invention discloses transgenic plants expressing therapeutically active proteins, preferably from their plastid genome or targeted to the vacuole. The present invention also describes the administration of such transgenic plants to a host in need thereof for the prevention or treatment of diseases. In a preferred embodiment, such plants or matter derived from such plants is administered orally to a host. Thus, allergen expression vectors for tobacco plastids are prepared

=> d 2 ab

ANSWER 2 OF 3 CAPLUS COPYRIGHT 2004 ACS on STN

The present invention discloses transgenic plants expressing therapeutically active proteins, preferably from their plastid genome or targeted to the vacuole. The present invention also describes the administration of such transgenic plants to a host in need thereof for the prevention or treatment of diseases. In a preferred embodiment, such plants or matter derived from such plants is administered orally to a host. Thus, allergen expression vectors for tobacco plastids are prepared

=> d 3 ab

ANSWER 3 OF 3 CAPLUS COPYRIGHT 2004 ACS on STN

The present invention provides a dual method for producing male-sterile plants. Two genetically transformed plants, parents 1 and 2, are crossed to obtain male-sterile offspring. Parent 1 is transformed with an expression cassette comprising a nucleotide sequence encoding an anther-specific promoter which is operably linked to a nucleotide sequence encoding a transactivator. Parent 2 is transformed with an expression cassette comprising a target nucleotide sequence, which is capable of being activated by the transactivator, operably linked to a nucleotide sequence which encodes RNA or a polypeptide which will disrupt the formation of viable pollen. Therefore, crossing parent 1 with parent 2 results in male-sterile offspring. The male-sterile plants are useful for producing hybrid seed. The invention also provides compns. and methods for high level expression of a coding region of interest in a plant.

L10 ANSWER 1 OF 5 CAPLUS COPYRIGHT 2004 ACS on STN DUPLICATE 1
TI Vaccination with E. coli recombinant empty viral particles of infectious bursal disease virus (IBDV) confer protection

L10 ANSWER 2 OF 5 CAPLUS COPYRIGHT 2004 ACS on STN TI A gene expression silencing system and its different uses

- L10 ANSWER 3 OF 5 CAPLUS COPYRIGHT 2004 ACS on STN DUPLICATE 2 TI Infectious RNA transcripts from grapevine virus A cDNA clone
- L10 ANSWER 4 OF 5 AGRICOLA Compiled and distributed by the National Agricultural Library of the Department of Agriculture of the United States of America. It contains copyrighted materials. All rights reserved.

  (2004) on STN DUPLICATE 3
- TI T7 RNA polymerase drives transcription of a reporter gene from T7 promoter, but engenders post-transcriptional silencing of expression.
- L10 ANSWER 5 OF 5 CAPLUS COPYRIGHT 2004 ACS on STN DUPLICATE 4
  TI Expression and assembly of the potato virus Y (PVY) coat protein (CP) in Escherichia coli cells

#### => d 2 ab

L10 ANSWER 2 OF 5 CAPLUS COPYRIGHT 2004 ACS on STN The invention relates to an expression-silencing system. A first DNA construct comprises a nucleotide sequence corresponding to the T7 RNA polymerase gene (T7-pol) which carries an NLS (nuclear localization signal) sequence, and at least one promoter and at least one terminator sequence operably linked to the T7-pol. A second DNA construct comprises a T7 promoter sequence (pT7), at least one targeting sequence downstream to said pT7 and at least one 3' non-translated terminator sequence operably linked to the targeting sequence. The targeting sequence can comprise tobacco mosaic virus non-coding sequence  $\Omega$ , and the terminator may originate from the NOS gene or the  $\beta$ -1,3-glucanase gene. The system can, upon its introduction into a cell, substantially silence the expression at the RNA level of a target sequence in the cell, in a tissue or organ regenerated from said cell, or in a progeny thereof, substantially silenced, by causing the substantial disappearance of the RNA or RNA transcript carrying said sequence or a functional part thereof. This silencing system may be used to identify a nucleic acid of interest within a plant's genome.

# => d 3 ab

ANSWER 3 OF 5 CAPLUS COPYRIGHT 2004 ACS on STN DUPLICATE 2

A full length cDNA clone of grapevine virus A (GVA) was constructed downstream from the bacteriophage T7 RNA polymerase promoter.

Capped in vitro-transcribed RNA was infectious in Nicotiana benthamiana and N. clevelandii plants. Symptoms induced by the RNA transcripts or by the parental virus were indistinguishable. The infectivity of the in vitro-transcribed RNA was confirmed by serol. detection of the virus coat and movement proteins and by observation of virions by electron microscopy. This is the first report of infectious RNA transcripts derived from a full-length cDNA clone of a member of the Vitivirus genus.